

The committee found that several state and local entities use hazardous and solid waste disposal strategies other than land disposal. For example, programs such as Florida's "Amnesty Days" have successfully collected household hazardous waste and hazardous waste from small-quantity industrial and commercial generators that otherwise might have been improperly disposed of. However, few states or communities have adopted programs for aggressively promoting source reduction of hazardous waste and recycling of solid waste.

- The committee, therefore, recommends that all state and local entities consider similar strategies for reducing improper disposal of household and other small-quantity generator hazardous waste. Municipalities and states should also consider the relative merits of comprehensive solid waste recycling and incineration programs.

#### Land Use Controls

Almost every activity on the land surface has some potential for contaminating the underlying ground water whether it is nonpoint sources such as residential lawn fertilization, the use of a septic tank, or highway runoff or point sources such as a discharge from an industrial lagoon or a hazardous waste disposal site. The degree of risk to ground water quality is controlled by two basic factors:

1. The susceptibility or sensitivity of the aquifer to contamination, such as a very shallow water table overlain by permeable sands.
2. The potential types, magnitudes, and locations of contaminant discharges to the aquifer from the specific land use activity. For example, an industry that uses large amounts of chlorinated organic solvents could potentially have a greater adverse impact on ground water than residential septic tanks or lawn fertilization.

Contamination sources located within the area of water recharge contribution of a wellfield in a shallow water table aquifer pose maximum risk. Lower risks are posed if the source is a substantial distance upgradient or is downgradient from the well. A source that is close to a well can be within the same aquifer, posing a high risk, or can be separated from the well by a geologic confining unit or a flow system boundary. An understanding of these relationships forms the principal basis for the land use approach to ground water protection. Certain land uses or activities can be restricted or prohibited within designated critical areas. All of the above factors should be considered in the delineation of areas where special controls will be applied.